

since the one when so much damage was done, two weeks before that. This rain was opportune, as it gave the Exposition management a chance to test the roofs, which had leaked badly. Those roofs that had been completed were found to be water-tight. In a few isolated instances more or less damage was caused by this rain, but these were in cases where the work of repairing the roofs had not been completed.

Much embarrassment has been caused the transportation department of the Exposition because exhibitors, in shipping their exhibits, have been negligent in marking the cases, stating where each one belonged. In order to prevent such embarrassment, the Exposition sent out, months ago, instructions as to how exhibits should be sent, with blanks to be attached to each package of exhibits. In instances where these instructions have been followed, exhibits are at once transferred from the cars and placed in the building and on the location, or as near to it as possible, where they belong. So many exhibits have come unmarked, and there has been so much negligence in this respect, that whole carloads of exhibits are delayed. As a consequence, there is a congestive condition of affairs in the transportation department. Were it not for these cargoes that cannot well be discharged, the tracks for handling exhibits would be nearly freed from cars each day. With from 200 to 300 cars of exhibits arriving every twenty-four hours, delays like these seriously hinder and lessen the likelihood of the Exposition opening in good shape on May 1.

Manitoba was not able to secure as much space as it wished from the allotment made to the Canadian government, and consequently has constructed a building of its own just outside the Exposition grounds. This building is now completed and is being fitted up with the exhibits of this province, and includes a large variety of displays, such as agricultural products, woods, polished and unpolished, fauna, educational exhibits, and a large variety of specimens of the handiwork of the Northwest Indians.

A model post office has been established by the Post Office Department in the southwest corner of the Government building. This post office is designed not only to be an exhibit of what a model post office should be, but it is also to serve as the postal substation for the Exposition grounds.

The annual meeting of the stockholders of the Exposition Company was held last week, and the old board was re-elected with a few minor changes. This insures the re-election of the more important of the old officers. What little opposition there was to the re-election of the old board came from two or three men who sought to become members of the board themselves for whatever honor there might be in it, rather than because of any inefficiency of the old board.

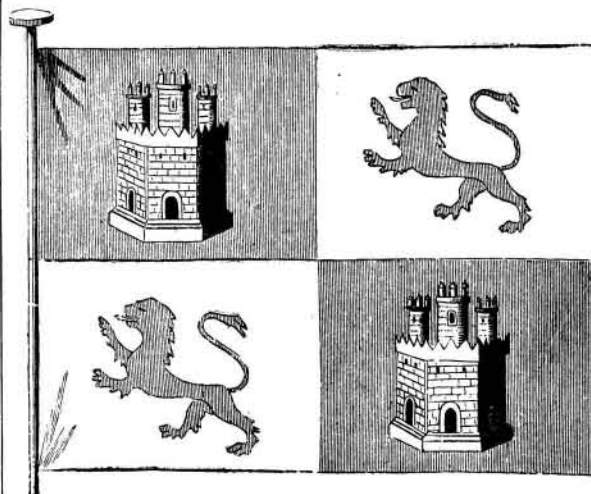
The deceased artists of America have been remembered, their names being given on the ceiling border in the Art Gallery. Among the names are the following: Fuller, Wylie, Brown, Kensett, Gifford, Audubon, Malbone, Pratt, West, Mount, Hunt, Lentz, Mignot, Hicks, Quartley, Jouett, Allston, Smibert, Copley, Lambden, Baker, Rossiter, Gray, Bellows, Jarvis, Waldo, Pine, Peale, Freeman, and Weir.

The holders of the concession for the Esquimaux village have a serious embarrassment on hand in the fact that the Esquimaux are not inclined to wear their fur clothing during the hot spring days, preferring in their place suits of blue jeans. As this is not a typical Esquimaux costume it detracts somewhat from the interest in the concession. The matter has been taken into the courts and the Esquimaux have won their case.

A MAMMOTH tusk was recently found in a mine at Schoningen, Brunswick, which, although broken off at the point, measures twelve feet in length and two feet in circumference, and weighs 224 pounds.

THE KRUPP EXHIBITS FOR THE COLUMBIAN EXPOSITION.

The steamship Longueil, which arrived at Baltimore March 18, brought the principal part of the contribution of the great German gun factory at Essen to the Columbian Exposition. By far the most noticeable portion of this exhibit is a great 120 ton gun, although the display includes several smaller guns and other war material, as well as some heavy steel productions for railway use. In last week's SCIENTIFIC AMERICAN was a picture, from a photograph, showing the guns as



The Standard of Castile, displayed by Columbus when he landed on Guanahau, or Watling Island.

they arrived in the ship's hold, and in the accompanying illustration the large gun is shown suspended from the big hydraulic hoisting shears as it is being moved from the ship to the railway car. The shears are the largest and most powerful in the country. They are designed to lift 150 tons, have an overhang of 57 feet, and are 120 feet high. The gun is the largest piece of freight ever handled by any railroad, and was conveyed to Chicago by the Pennsylvania Railroad, on a car specially built for the purpose at their Altoona shops, from drawings furnished by Mr. Fried. Krupp, the car being similar to one built for the transport of the gun over German railways.

The car has a capacity of 285,000 pounds and is built entirely of boiler steel, the center plates and center

bearings being steel castings. It consists of a major bridge, two minor bridges and four eight-wheel cars. The gun rests in the major bridge on two supports, designed to closely fit its perimeter. In addition to these two supports, to avoid any vibration while in transport, the muzzle is secured by wedge-shaped oak blocks set in cast iron shoes and drawn up to the muzzle by means of right and left hand screws. The major bridge is 50 feet from center to center of supports, and rests directly on the side bearings, while, on the other hand, the minor bridges are supported by their respective center plates.

The cars have been designed so as to combine strength with flexibility, and are equipped with Janney couplers and draughttrigging specially constructed for strength. The journals are $4\frac{1}{2}$ by 9 inches; $37\frac{1}{2}$ inch wheels, with wrought iron centers and steel tires are used. Each car has a 14 inch Westinghouse air brake cylinder, with brake on all wheels, and National hollow brake beams with Christie brake heads and shoes.

The load on cars is thoroughly equalized by 32 elliptic springs of 36 inch span, each spring having 18 leaves $3\frac{1}{2}$ inches wide and $\frac{3}{8}$ inch thick.

The extreme length of the car is 90 feet 9 inches; extreme width, 9 feet 10 inches; extreme height to top of bridge, 9 feet $9\frac{1}{4}$ inches.

For the foregoing particulars of construction of this great gun car we are indebted to Mr. Theo. N. Ely, chief of motive power of the Pennsylvania Railroad.

CRISTOBAL COLON DE LA CERDA, DUKE OF VERAGUA, MARQUIS OF JAMAICA.

Among the distinguished personages from foreign lands who are visitors to the World's Columbian Exposition is a direct descendant of the great admiral, the Duke of Veragua. For a pedigree and titles and the accompanying portrait we are indebted to *La Ilustracion Espanola*.

The present Duke of Veragua and Marquis of Jamaica, His Exc. Don Cristóbal Colón de la Cerda, is the direct descendant of the celebrated discoverer of the new world. He is the possessor of the titles "honorable and commemorative, of Admiral of the Oceanic Sea and Governor in Chief of the Indies," with the right to use the corresponding uniforms." We give his portrait. The Duke of Veragua was born in Madrid in 1837. He took the course of jurisprudence in the Universidad Central, receiving the title of advocate; he did not figure in politics until after the revolution of 1868, when he fraternized with the liberal group, that defended the alliance of the democracy with the representative monarchy. He was elected a deputy to the Cortes by the district of Arévalo in the legislatures of 1871 and 1873, and in the following year he was a member of the Municipal Board of Madrid.

When the legitimate monarchy was restored, he represented a district of Puerto Rico in the Congress, and he adhered to the liberal party. A senator by his own right since the year 1876, he was Vice-President of the Alta Camara (Upper House) in 1890, when he was made Minister of the Interior in the cabinet over which Sagasta then presided.

He was President of the Congress of Americans that met in Madrid in 1881, President of the Superior Court of Agriculture, Royal Delegate of the "Instituto Agrícola" of Alfonso XII., and Vice-President of the Board of Administration of the *Monte de Piedad* (a money-lending establishment under government control) and the Savings Banks of Madrid, and on July 21, 1887, he was decorated with the Great Cross of Charles III., possessing the diploma of Gentleman in Waiting, Grandee of Spain, since July 24, 1882.

The government of H. M. the Queen Regent, offering honorable testimony of consideration to the descendant of the illustrious admiral, appointed the Duke of Veragua President of the Central

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CRISTOBAL COLON DE LA CERDA—LINEAL DESCENDANT OF COLUMBUS.